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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,558	01/22/2002	Steffen Hofacker	Mo6676/LeA 34,925	7309
157	7590	08/06/2004	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			BISSETT, MELANIE D	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 08/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/054,558	<b>Applicant(s)</b> HOFACKER ET AL.	
	<b>Examiner</b> Melanie D. Bissett	<b>Art Unit</b> 1711	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-14 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☒ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

1. Some of the rejections based on 35 USC 102 and double patenting rejections have been withdrawn based on the applicant's amendments to the claims and to the terminal disclaimer filed. The rejections based on 35 USC 103 have been altered to reflect the amended claims.
2. It is noted that the Form PTO-892 filed 10 February 2004 contains a typographical error, where an incorrect reference has been cited. For clarification of the record, the examiner has correctly cited this reference in a present Form PTO-892. The applicant correctly cited this reference as US 4,292,350 to Kubitza et al. in the response to the non-final Office action.

***Terminal Disclaimer***

3. The terminal disclaimer filed on 7 May 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Application 10/054,386 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Claim Rejections - 35 USC § 102***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by BASF as evidenced by Kubitza et al.
6. From a prior Office action:

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BASF teaches two-component coating compositions for aluminum substrates comprising a binder component and hardener component (abstract). The binder component must have at least one active hydrogen-containing compound, suggesting a resin reactive toward isocyanate groups (p. 4 line 32-p. 5 line 6). The hardener component comprises an isocyanate and a silane oligomer (p. 7 lines 2-4). Suitable isocyanates have preferred functionalities of 3-4 (p. 7 lines 24-32), where biurets of hexamethylene diisocyanate are most preferred (p. 7 lines 18-23). Kubitza teaches that conventional biurets of HDI have an isocyanate content of 23.5% by weight and a functionality of greater than 3 (col. 4 lines 55-62). Thus, the preferred use of such compounds in BASF suggests the applicant's claimed polyisocyanate. The silane oligomer is a reaction product of the isocyanate with a coupling agent, where the coupling agent fits the applicant's formula (I) of claims 2-5 (p. 9, all). The two-component coatings of BASF are preferably applied to untreated aluminum as a primer coating for other coatings (p. 12, lines 6-16), and the examples show the application of at least two organic coatings covering the primer coating (examples 3-4).

### ***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over BASF as evidenced by Kubitza and in view of Mager et al.

9. From a prior Office action:

BASF and Kubitza apply as above, teaching the application of a primer composition to aluminum substrates for automotive body panels (p. 11 lines 28-32). Although BASF teaches the use of top coatings on the primer layers, the reference does not teach the applicant's claimed modified inorganic layer. Mager teaches coating compositions suitable for plastics, metals, and glass, where the coatings comprise a carbosiloxane fitting the applicant's formula (III) (abstract). Exemplified compounds also fit the applicant's claim 9 limitation of the formula (col. 1 lines 56-62). The coatings are useful as anti-graffiti coatings on metallic substrates or on organic coatings, where the application to vehicles is noted (col. 2 lines 25-32). Thus, it is the examiner's position that it would have been prima facie obvious to use the coatings of Mager's invention as a top coating in BASF to provide anti-graffiti properties to the prepared articles.

10. Note also that the claims, as amended, recite an intended future use "for a polymeric substrate", where the substrate "comprises a polycarbonate". The claims

drawn to a protective covering do not include the substrate as a claimed feature but rather draw attention to the intended use of the covering. Since the coatings of BASF and Mager are suitable for both plastics and metals, it is the examiner's position that the coatings are capable of use on a polycarbonate substrate.

11. Claims 1-9 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over BASF as evidenced by Kubitza and in view of Bayer.

12. From a prior Office action:

BASF and Kubitza apply as above, teaching the application of a primer to various substrates, including metal, glass, and plastics (p. 11 lines 28-32). Although BASF teaches the use of top coatings on the primer layers, the reference does not teach the applicant's claimed modified inorganic layer. Bayer teaches coatings comprising a carbosiloxane fitting the applicant's formula (III) (p. 4 line 19-p. 5 line 11). Preferred compounds also fit the applicant's claim 9 limitation of formula (III) (p. 6 lines 4-14). The coatings are suitable for improving scratch resistance to substrates including polycarbonates and poly(methyl)methacrylates (p. 14 lines 10-14). Other substrates include metals and glass (p. 14 line 27-p. 15 line 2). Bayer specifically teaches that the adhesion of the coatings may be improved by priming the substrates and that the coatings serve as a top coating to base polyurethane coatings (p. 14 lines 16-25). Therefore, it is the examiner's position that it would have been prima facie obvious to use the coatings of Bayer as a top coating in the invention of BASF to improve the scratch resistance of the prepared articles. Also, since BASF teaches application to polymeric substrates, it is the examiner's position that it would have been prima facie obvious to apply the coatings to polycarbonate or poly(methyl)methacrylate substrates by Bayer's teaching to provide transparent articles with improved scratch resistance.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over BASF as evidenced by Kubitza et al. and in view of Mager et al. as applied to claims 1-9 and 14 above, and further in view of Bayer.

14. From a prior Office action:

BASF, Kubitza, and Mager apply as above, where both BASF and Mager teach coating polymeric substrates (see Mager, col. 2 lines 25-32, stating that the coatings may be applied to plastics for improving mechanical strength). However, the references do not specify the polymeric substrates claimed by the applicant. Bayer teaches a similar top coating, where the coatings are known to improve the scratch resistance of polycarbonates and poly(methyl)methacrylates (p. 14 lines 10-14). Thus, it would have been prima facie obvious to apply the coatings of BASF and Mager to polycarbonates or poly(methyl)methacrylates to form transparent articles having improved mechanical strength and scratch resistance.

### ***Response to Arguments***

15. In response to applicant's argument that Mager et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both BASF and Mager et al. are drawn to coatings for metal, plastic, or glass substrates. Both references refer to the use of the coatings in vehicular applications. Mager teaches that the coatings may be applied to metallic substrates or organic coatings, for example on vehicles (col. 2 lines 25-32, as cited above). BASF teaches subcoatings for vehicular aluminum applications to be further overcoated. Thus, it is the examiner's position that the references to vehicular coatings are analogous. The examiner has reasoned that, since Mager teaches the use of the coatings as anti-graffiti coatings for metallic substrates or organic coatings on vehicles, and because BASF teaches undercoatings for aluminum substrates to be used in vehicles, it would be obvious to add the coatings of Mager to the coated substrates of BASF to provide anti-

graffiti properties to the invention of BASF. Thus, one would be motivated by the anti-graffiti properties of the Mager invention.

16. Regarding the applicant's argument that Mager does not disclose the claimed invention, it is noted that the reference has been used as a secondary reference to help teach a combined covering. The combination suggests the claimed structures.

17. In response to the applicant's arguments that Hofacker et al. (US 2002/0142169) is not available as prior art for the present application, it is noted that the examiner has not included this reference in a rejection under 35 USC 103. The reference used to support the rejection of claim 13, Bayer (CA 2,267,052), was published on 30 September 1999. Thus, the reference is available as prior art in the present application.

### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (571) 272-1068. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mdb



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